

What is claimed is:

1. An access port comprising:
  - a housing with a first opening formed therein; and
  - a septum mounted within the housing sealing the first opening, the septum including an outer surface covering the first opening and self-sealing after penetration by a needle and an attachment portion for securing the septum to the housing, the attachment portion including a chamfer which, when the septum is mounted within the housing is subject to a force oriented substantially perpendicularly with respect to a plane of the outer surface, the chamfered portion redirecting a portion of the force to compress the outer surface.
2. The access port according to claim 1, wherein the housing includes a second opening for connection to a catheter.
3. The access port according to claim 1, wherein a base of the housing forms a septum seat and a cover of the housing secures the septum on the seat so that the attachment portion is compressed therebetween.
4. The access port according to claim 1, wherein the chamfer comprises at least one surface angled relative to the operative surface.
5. The access port according to claim 4, wherein the at least one angled surface forms a 45 degree angle to the operative surface.
6. The access port according to claim 1, wherein the chamfer comprises a stepped surface extending away from the operative surface.

7. The access port according to claim 1, wherein the chamfer comprises a curved fillet extending away from the operative surface.
8. The access port according to claim 7, wherein the curved fillet has a substantially constant radius of curvature.
9. The access port according to claim 1, wherein the attachment portion comprises an annular portion abutting a septum seat of the housing.
10. The access port according to claim 1, wherein the operative surface comprises a substantially planar membrane overlying the first opening.
11. The access port according to claim 1, wherein the operative surface comprises a membrane which, when unconstrained has a dimension greater than a corresponding dimension of the first opening so that, when placed within the first opening the operative surface is compressed thereby.
12. A septum for an access port, comprising:
  - an attachment portion adapted to abut a septum seat of the access port;
  - an operative surface adapted to permit penetration by a needle and resealing itself after removal of the needle; and
  - a chamfered portion providing a transition between the attachment portion and the operative surface, the chamfered portion re-directing a component of a force applied to the chamfered portion to compress the operative surface.
13. The septum according to claim 12, wherein the operative surface is sized to substantially overlie an opening of the access port.

14. The septum according to claim 12, wherein the chamfer portion is adapted to apply to the operative surface a radially compressive component of a force applied substantially perpendicularly thereto by assembly of the access port.
15. The septum according to claim 12, wherein the chamfered portion comprises a fillet joining the operative surface to the attachment portion.
16. The septum according to claim 12, wherein the chamfered portion comprises an angled surface joining the operative surface to the attachment portion.
17. The septum according to claim 12, wherein the chamfered portion comprises a stepped surface joining the operative surface to the attachment portion.
18. The septum according to claim 12, wherein the operative surface is formed of a flexible polymeric material.